

DETAILED ACTION

1. Claims 1-4 and 6-10 are pending in this application. Claim 5 is canceled.

Claim Objections

2. Claims 1-4 and 6-10 are objected to because of the following informalities: Claim 1 recites the limitation "...handle comprising annular slot..." in line 3. This should read --...handle comprising an annular slot...--, for clarity. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 4 recites the limitation "wherein said mount comprises" in line 1. A mount is not previously disclosed in claim 1, since the claim was amended. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 1, 2, 4, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,431,654 to *Nic (Nic)* in view of US Patent No. 4,523,705 to *Belanger et al. (Belanger)* and US Patent No. 4,033,484 to *Ornsteen (Ornsteen)*.**

Regarding claims 1 and 9, *Nic* discloses a dispenser comprising a handle portion (40) with an annular slot (23) configured to receive a flange (25) on a fluid cartridge (12), a plunger (50 with 52) mounted for linear motion along the longitudinal axis of the cartridge (Fig. 4), a trigger mechanism comprising a trigger (70) connected to a gripper mechanism (81) which engages the plunger in response of force to the trigger by a user (col. 6, ll. 49-54).

Nic does not disclose that the gripper mechanism disengages completely from the plunger upon release of pressure from the trigger. However, *Belanger* teaches a trigger mechanism comprising a trigger (40) and gripper mechanism (80) which engages a plunger (84 with 86) in response to the trigger by a user (col. 4, ll. 26-31) to advance the plunger, wherein the gripper mechanism disengages completely from the plunger upon release of pressure from the trigger (inherent that a release of pressure would return the gripper mechanism to the state shown in Figure 4 in which it can clearly be seen that the gripper mechanism 80 is completely disengaged from the plunger). The substitution of the trigger mechanism of *Belanger* for the trigger mechanism of *Nic* (40, 76, 78, 80 and 82 of *Belanger* for 70, 80, 81, and 130 of *Nic*) would have been obvious to one of ordinary skill in the art at the time of the invention since the substitution of the trigger mechanism of *Belanger* would have yielded predictable results, namely, the forward advancement of the plunger of *Nic* (50 with 52) upon application of pressure to the trigger mechanism by the user of the device. Furthermore, *Belanger* provides the benefit of simplifying the construction of *Nic*.

Belanger further teaches a flexible disc (34) received in an annular groove in the handle portion (Fig. 1) forming a drag element (col. 2, ll. 67-68).

Nic, as modified by *Belanger*, does not disclose that the flexible disc slidingly engages the plunger in a friction fit. However, *Ornsteen*, teaches that the flexible disc (66) slidingly engages the plunger in a friction fit (col. 4, ll. 50-52). The limitation, to prevent excessive movement of the plunger away from the cartridge when the pressure is released from the trigger, is considered to be a functional limitation. It is inherent that the structure disclosed in *Nic*, as modified by *Belanger* and *Ornsteen*, is capable of performing this function. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to substitute the flexible disc in the annular slot as taught by *Belanger* and *Ornsteen* for the non-return pawl (130) of *Nic* since the substitution of the flexible disc would have yielded predictable results, namely, the minimal return of the plunger after the release of the trigger.

Regarding claim 2, *Nic* further discloses a plunger (50 with 52) that comprises a surface having a plurality of teeth (54) spaced in the direction of the longitudinal axis (col. 5, ll. 6-7).

Regarding claim 4 (as best understood), *Nic* further discloses an annular slot (23) having an angular extent of about 180 degrees (Figures 1 and 3).

Regarding claims 6 and 7, *Nic*, as modified by *Belanger* and *Ornsteen*, shows the trigger mechanism further comprises a pressure relief spring (*Belanger*, 78).

Regarding claim 8, *Nic*, as modified by *Belanger* and *Ornsteen*, shows the trigger mechanism comprises a return spring (*Nic*, 120; Fig. 3) attached between the gripper and a shell (*Nic*, 121; Fig. 3).

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Nic* in view of *Belanger* and *Ornsteen*, as applied to claim 1 above, and further in view of US Patent No. 4,905,550 to *Albrecht* (*Albrecht*).

Nic, as modified by *Belanger* and *Ornsteen*, shows all aspects of applicant's invention as set forth in claim 1, but does not disclose the plunger comprising a continuous resilient surface. However, *Albrecht* teaches it is known to utilize a continuous resilient surface (10) in a gripping interaction to improve the gripping relationship between the parts involved in the gripping interaction (col. 1, ll. 41-43). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, under the teachings of *Albrecht*, to have provided either of the parts of the gripping interaction of *Nic*, as modified by *Belanger* and *Ornsteen*, (gripping mechanism or plunger) with a continuous resilient surface in order to improve the gripping relationship between the parts.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Nic* in view of *Belanger* and *Ornsteen*, as applied to claim 1 above, and further in view of US Patent No. 4,826,049 to *Speer* (*Speer*).

Nic, as modified by *Belanger* and *Ornsteen*, discloses all aspects of the applicant's invention as set forth in claim 1, but does not disclose the dispenser in combination with a heating stand. However, *Speer* teaches a dispenser like that of *Nic*, as modified by *Belanger* and *Ornsteen*, which is made cordless by use of a heating stand (14). It would have been obvious to one having ordinary skill in the art at the time of the invention, under the teachings of *Speer*, to have made the dispenser of *Nic*, as modified by *Belanger* and *Ornsteen*, cordless and in combination with a heating stand in order to provide greater flexibility of use (*Speer*, col. 1, ll. 28-31).

Response to Arguments

12. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent 5,893,488 to Hoag et al., which further discloses a dispenser similar to the claimed invention with annular slot configured to receive a flange on a cartridge.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS WEISS whose telephone number is (571)270-1775. The examiner can normally be reached on M-Th 8:00 - 6:00 p.m. EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. W./
Examiner, Art Unit 3754

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